

 **UNIVERSITY OF KABIANGA**

 **UNIVERSITYEXAMINATIONS**

 **2017/2018 ACADEMIC YEAR**

 **THIRD YEAR FIRST SEMESTER EXAMINATON**

 **FOR THE DEGREE OF BACHELOR OF EDUCATION**

 **COURSE CODE: *CIM 322***

 **COURSE TITLE: CHEMISTRY SUBJECT METHODS**

**INSTRUCTIONS:**

1. Answer **QUESTION ONE** and any other **TWO** questions.
2. Do not write on the question paper

**Question One-30 Marks**

1. Identify a Chemistry practical at secondary school level and use to point out four basic science process skills that may be developed during the practical. (4 marks)
2. State and explain the three main domains of instructional objectives for chemistry teaching. As suggested by Benjamin Blooms. (6 marks)
3. Discuss the role of Chemistry in the society. (5 marks)
4. Effective teaching of Chemistry relies heavily on well written instructional objectives. Discuss five characteristics of well written instructional objectives. (5 marks)
5. Explain how external examinations control the school curriculum. (4 marks)
6. Science as a discipline can be considered from two viewpoints. State and explain how these view points are affecting the teaching and learning of science. (4 marks)
7. Briefly explain the role of the Chemistry teacher during KCSE Examinations. (2 marks)

**Question Two-20 Marks**

1. Discuss four factors that a secondary school Chemistry teacher should take into consideration when selecting a teaching method for use in chemistry instruction. (8 marks)
2. Outline the justification for involving learners in experiment work in Chemistry in secondary school. (4 marks)
3. Lesson introduction is designed to attract attention, create interest and direct thoughts of listeners. Identify three examples of methods of introducing Chemistry lessons. (3 marks)
4. Explain five weaknesses shown by form four students when answering Chemistry questions set by Kenya National Examination Council (KNEC). (3 marks)

**Question Three-20 Marks**

1. Describe when and how each of the following should be used:
2. Safety goggles. (2 marks)
3. Lab coat. (2 marks)
4. Gas mask. (2 marks)
5. Eyewash fountain. (2 marks)
6. Fire extinguisher. (2 marks)
7. Discuss any five Chemistry laboratory features that provide for safety of its users. (10 marks)

**Question four-20 Marks**

1. Planning is a very important step in the teaching of Chemistry. Discuss the advantages of planning. (6 marks)
2. When planning for instruction, teachers are expected to use the syllabus to draw appropriate scheme of work and consequently a lesson plan.
3. Prepare a scheme of work for the topic “Acids, Bases and Indicators,” to be taught in one week to a Form 1 in a Kenya secondary school guided by the current Chemistry syllabus. (8 marks)
4. Using the scheme of work prepared above, prepare a lesson plan for a single lesson. (6 marks)

**Question Five-20 Marks**

1. Students who are trained in scientific method are expected to solve problems in any situations they may come across. Discuss the major steps involved in this process. (6 marks)
2. The development of chemistry before 1800 A.D was slow. Give reasons for this. (5 marks)
3. Justify the importance of teaching aids in chemistry instruction. (5 marks)
4. Discuss the structure of a complete chemistry KCSE examination. (4 marks)